UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,564	01/17/2001	Dean R. Vermeire	4286600-36	6887

			EXAMINER
21129	7590	10/08/2003	WOOD, WILLIAM H

SPENCER, FANE, BRITT & BROWNE
1000 WALNUT STREET
SUITE 1400
KANSAS CITY, MO 64106-2140

ART UNIT	PAPER NUMBER
2124	5

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2001* .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-7* is/are rejected.

7)☒ Claim(s) *4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 May 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claims 1-7 have been examined.

Priority

1.   Acknowledgement of claim to CIP application from now patent 6,209,124.

Information Disclosure Statement

2.   The information disclosure statement (IDS) submitted on 17 January 2001 was

considered by the examiner.

Drawings

3.   The drawings are objected to by Draft Person's review (see attached PTO-948).

The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
>
> claiming the subject matter which the applicant regards as his invention.

5.   Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 5 includes the element: *(having a data element)* in line

2 of the claim. The element should be rewritten without parenthesis, for example

source code, having a data element, is parsed.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hirao** et al. (USPN 6,442,749) in view of **Humpleman** et al. (USPN 6,546,419) and in further view of **Purple** (USPN 6,252,587).

In regard to claim 1, **Hirao** disclosed the limitations:

- *A method for translating the contents of a binary data record existing in a programming language* (column 1, lines 6-17; column 2, lines 3-7 and 28-42) *comprising the steps of:*

- (a) determining a data record layout of a binary data record in an architecture-specific program *(column 2, lines 4-6 and lines 10-12; column 3, line 65 to column 4, line 3; layout of component's data needed in order for wrapper to be effective)*,

- *(c) modifying said architecture-specific program* (column 1, lines 61-63; column 2, lines 13-27; column 4, lines 4-19; program/component is modified to include an intermediating conventional wrapper, not citing script wrapper)

Hirao did not explicitly state the limitations: *said data record layout comprising a name component and a contents component; (b) associating a first reference to said name component and a second reference to said contents component of said data record layout, said first and said second references operating as address parameters to allow a programming interface to select said name component and said contents component*

from said data record layout in response to a data request; and *to include said first and said second references for use by said programming interface.* **Humpleman** demonstrated that it was known at the time of invention to provide references to name components and contents components (column 18, lines 48-51) in order to allow a programming interface access to data requested. It would have been obvious to one of ordinary skill in the art at the time of invention to implement a system of using a wrapper of data layouts for bridging data from separate components as found in **Hirao** with an XML intermediate data format using references to name and contents as found in **Humpleman's** teaching and thus producing a system of a wrapped component, wherein the wrapper uses the references to name and content to fill out an XML document. This implementation would have been obvious because one of ordinary skill in the art would be motivated to provide a generic data format for components of differing conventions to communicate (XML's purpose is for sharing information; and **Hirao** indicates using XML as an intermediate data structure, column 7, lines 20-23).

Hirao did not explicitly state *(d) generating source code for a software component of an object-oriented programming system, said software component being adapted to send to said programming interface said data request for the content of said binary data record associated with said reference, and said software component being adapted to receive from said programming interface a response to said data request.* **Purple** demonstrated that it was known at the time of invention to generate object code (column 2, lines 39-63; column 8, lines 54-62) for communicating legacy data. It would have

been obvious to one of ordinary skill in the art at the time of invention to implement the

above conventional wrapper communicating in/out data through XML system of **Hirao**

and **Humpleman** with generating an object-oriented component for communicating the

legacy data as suggested by **Purple**'s teaching. This implementation would have been

obvious because one of ordinary skill in the art would be motivated to allow commonly

known (object-oriented) software components to communicate with older software

(clearly aids in compatibility and system maintainability).

In regard to claim 2, **Hirao**, **Humpleman** and **Purple** disclosed the limitation *wherein*

said identifying step further comprises translating the source code of said

architecture-specific program to a language-neutral representation including the

hierarchical structure of said architecture-specific program (**Purple**: Figure 2,

hierarchical structure).

In regard to claim 3, **Hirao**, **Humpleman** and **Purple** disclosed the limitation *wherein*

said associating step further comprises a published programming interface to allow

multiple programming languages to connect with an interprocess communications

mechanism to deliver said name component of said record layout and an

architecture-specific binary data record to said software component (**Hirao**: column 2,

lines 3-6, API).

In regard to claim 5, **Hirao**, **Humpleman** and **Purple** disclosed the limitation *wherein an architecture-specific program source code (having a data element) is parsed to create a language neutral representation of said data element where the result of the parsing is stored in a persistent storage medium such as a relational database or a file system* (**Hirao**: disclosed XML and **Humpleman**: disclosed XML).

In regard to claim 6, **Hirao**, **Humpleman** and **Purple** did not explicitly state the limitation *wherein said generating step further comprises dynamically invoking a compiler to convert said source code of said software component into a binary form.* Official Notice is taken that it was known at the time of invention that java uses just-in-time compiling (dynamic). It would have been obvious to one of ordinary skill in the art at the time of invention to dynamically compile the source code generated by **Purple**'s teachings. This implementation would have been obvious because one of ordinary skill in the art would be motivated to utilize commonly known and well understood Java programming techniques.

In regard to claim 7, **Hirao**, **Humpleman** and **Purple** did not explicitly state the limitation *further comprising a software to load said generated binary form into memory for use.* Official Notice is taken that it was known at the time of invention to load applications or other programs. It would have been obvious to one of ordinary skill in the art at the time of invention to load a binary of an application to be executed. This implementation

would have been obvious because one of ordinary skill in the art would be motivated to

utilize a common technique for preparing stored programs for execution.

Allowable Subject Matter

8.   Claim 4 is objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims. The following is a statement of reasons for the

indication of allowable subject matter: claim 4 includes limitations not found or

reasonably suggested by the cited prior art of record. Specifically, *wherein said*

modifying step further comprises a base component from which generated source code

can be derived using object oriented inheritance language constructs is not disclosed by

Hirao or found in a combination of **Hirao** with **Humpleman** and **Purple**.
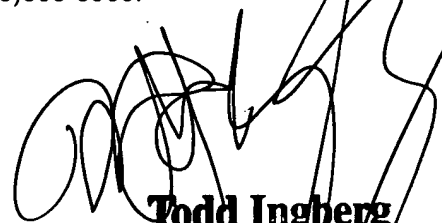
Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should
be directed to William H. Wood whose telephone number is (703)305-3305. The examiner can normally
be reached 7:30am - 5:00pm Monday thru Thursday and 7:30am - 4:00pm every other Friday.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,
Kakali Chaki can be reached on (703)305-9662. The fax phone numbers for the organization where this
application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238
for After Final communications.
Any inquiry of a general nature or relating to the status of this application or proceeding should be
directed to the receptionist whose telephone number is (703)305-3900.

William H. Wood
September 30, 2003

Todd Ingberg
Primary Examiner
Group 2100